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MARYLAND FISHERIES

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CONTENTS

	Page
OYSTER OUTLOOK FOR FALL SEASON	1
JOINT CONVENTION OF NATIONAL ASSOCIATION OF SHELL-FISH COMMISSIONERS AND OYSTER GROWERS AND DEALERS' ASSOCIATION OF NORTH AMERICA	5
NOTES FROM A FREDERICK COUNTY FISHERMAN	7
DROUGHT EFFECTS IN WESTERN MARYLAND	9

OYSTER OUTLOOK FOR FALL SEASON

SEPTEMBER 1 USHERED in the oyster season for 1930, and, although the weather was extremely hot, there was a certain demand from the hotel business for oysters.

The months containing the letter "R" have long become associated in the public mind with oysters, but the majority of Marylanders will stick to crabs until the crisp air of October whets the appetite for the succulent bivalve.

Following its usual custom, the Conservation Department issued a letter to all its field officials in August to investigate the oyster bars and report conditions found to exist prior to the opening of the season. Some of these reports, which are given below, are favorable and some not so favorable. Taking them as a whole, the department would say that the indications are that oysters will be about as plentiful as last year, and in some localities the supply may exceed the previous season. Other sections indicate a shortage. The quality of the oysters, due to early spawning, is in some sections good; in others, having just spawned out, the oysters are thin. In a number of localities, a quantity of small oysters and spat is reported, which is encouraging for the future.

Western Shore

A report from Deputy Commander W. H. Sanders, of the Annapolis district, states that the oysters have good meats and have grown considerably. Prospects for season good.

Deputy Commander E. N. Dixon, of the West River district, reports that the prospects are good in his section. Investigations made by him cover from Thomas Point to Holland Point.

Deputy Commander James O. Rodgers, of the Herring Bay section, reports the oysters on Holland Point bar to be in good condition, and also states that shells planted last year not only had a large collection of spat but the young oysters have grown so rapidly that they will be three inches before the end of the present season.

Deputy Commander L. F. Miles says that an investigation of the oyster rocks in Patuxent River reveals them to be in fair shape for this early in the season.

The Potomac River section is divided into three districts: First, Smith Creek and St. Mary's River; second, around Blakistone Island, and third, Wicomico River. All deputy commanders in these sections report that oysters in the tributary waters of the Potomac are in some places fat and in flourishing condition, and in others, due likely to lack of rain and spawning, are not so good at this time. However, by the close of September there should be a marked improvement.

Both the St. Mary's River and Smith Creek, according to Deputy Commander A. P. Cullison, have a prolific catch of spat on the shells planted, and the indications point to an excellent future for this locality.

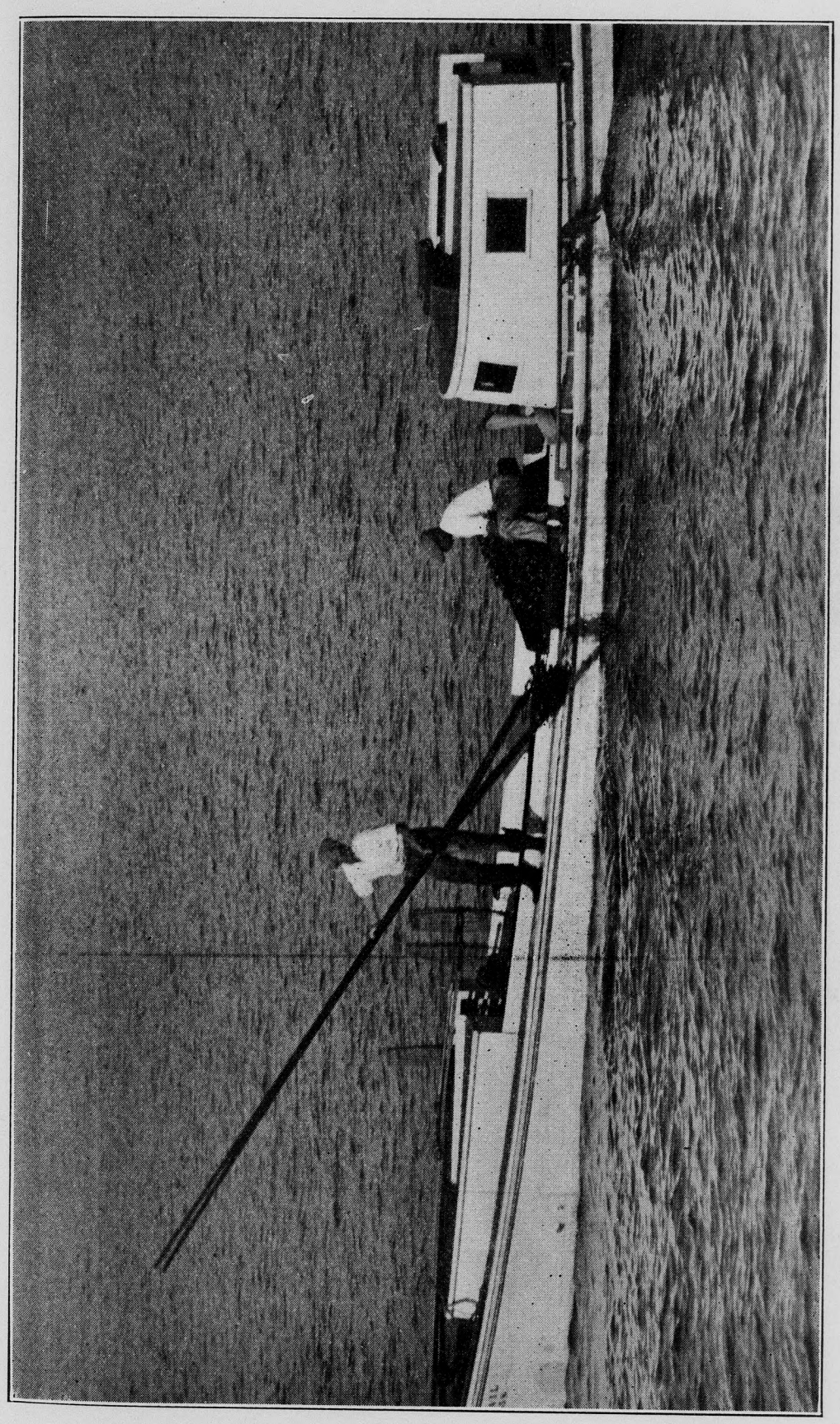
Deputy Commander E. J. Plowden states that, in his investition of the natural oyster bars in his district, he finds some marketable oysters and also some running from 2″ to 2½″ that will grow to legal size in several months. The shells planted in his section both in 1929 and 1930 have great quantities of spat, which augurs well for the future.

Deputy Commander T. M. Wise states that the oysters in Wicomico River are not overplentiful but are of good size. There is a heavy catch of spat on the shells planted this year. In his investigations of the Potomac River bars, which the tongers are permitted to use before the dredging season opens, he notes an improvement in the upper part of the river over last year.

Eastern Shore

A report from Deputy Commander G. F. Akers, of Kent County, states that oysters are in good condition in the Chester River and in the lower part of this river are free from mussels. Higher up there are more mussels to be found. Great numbers of small oysters are present in Chester River, which will require careful inspection to enforce the cull law. The oysters on Swan Point are clean of mussels but up to this time not fat.

Deputy Commander James G. Ruth, of Kent Island, states that the oysters in Eastern Bay and Wye River are in the best condition for four years, clean of mussels in Eastern Bay and only a few in Wye River. A large catch is looked for in that locality.



THE OYSTER SEASON OPENS
Tongers at Work on Tolley's Point Bar, Mouth of Severn River

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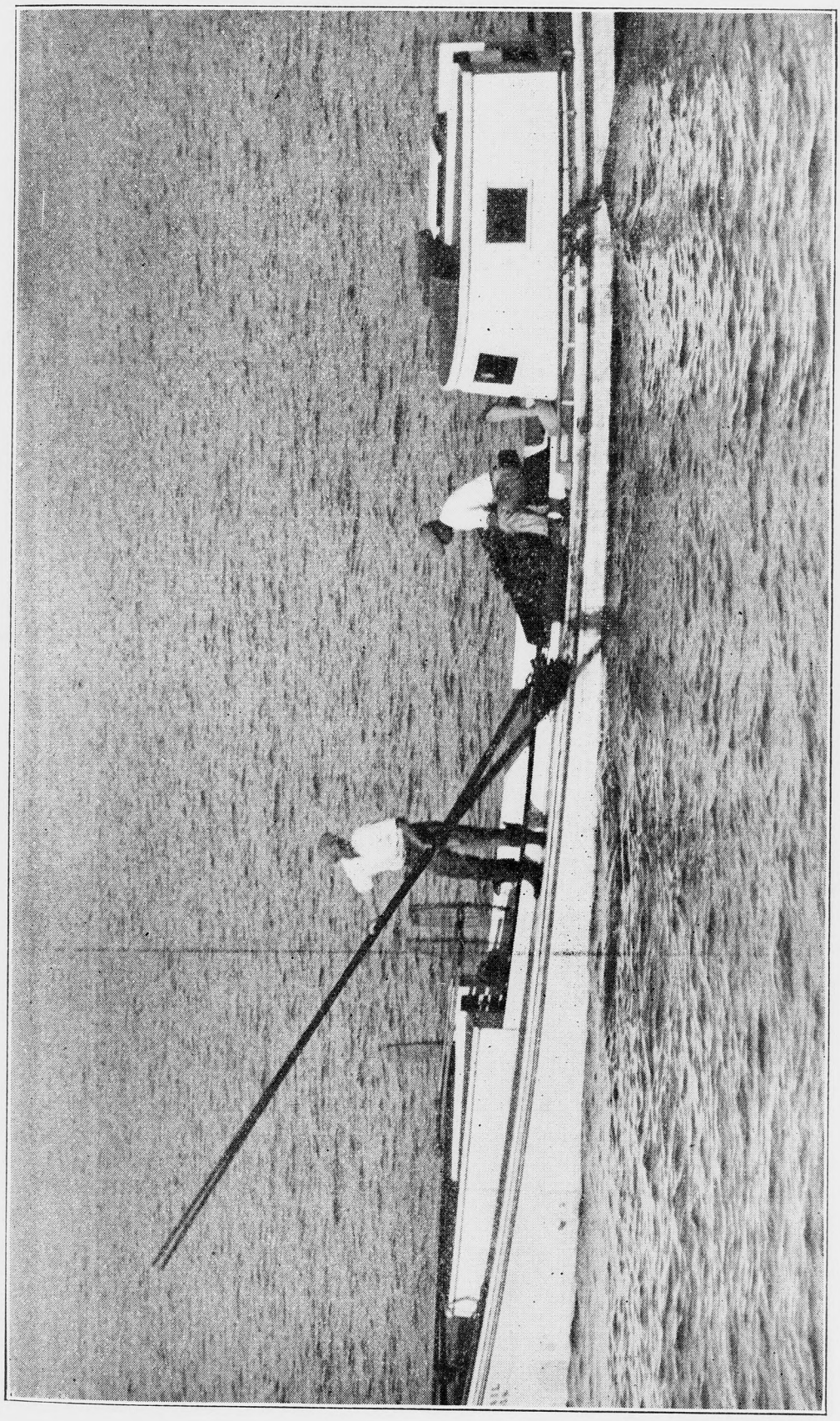
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Deputy Commander W. J. Haddaway, in the Great Choptank River section, states that in Broad Creek there is a large percentage of small oysters, at least 50% being unmerchantable. He considers the oysters in Great Choptank River were late spawning and their condition is not so good as in some other localities. In Tred Avon River, however, oysters are fine for this time of the year. Shells clean and most all legal-size oysters.

Deputy Commander D. C. Kinnamon, of the Cambridge district, reports the upper Choptank oyster bars not prolific; thinks the men can catch from 6 to 7 bushels a day. On the scraping ground, including Howell Point, Castle Haven and bars in that locality show a good catch of spat and in some places the oysters are in greater quantity than last year. The oysters in this district, however, likely due to late spawning, are very thin.

Deputy Commander E. A. Taylor, in the Nanticoke River section says that examination of oyster bars reveals oysters to be good in size and a catch of 10 to 20 bushels to a boat is looked for. At this time they are not as far as later in the season.

Deputy Commander Wilby J. Pritchett, of Fishing Bay, says that the oyster rocks of Great Shoals and Sharks Fin Light have more marketable oysters than last year and a fair catch of small ones.

Deputy Commander D. B. Shores, of Deals Island section, states that the oyster bars in his district have a fair supply of large oysters and, having spawned out, are beginning to fatten. There is a fairly good catch of spat on the shells planted and a reasonable supply of young oysters.

Report from Deputy Commander Alonzo Bozman, of the Manokin River and lower Tangier Sound district, states that in his investigation on Piney Island and Chain Shoals he finds a lot of spat. On Terrapin Sands, Long Rock, Turtle Egg, and the west side of Tangier Sound there is no young growth and no spat. All shells planted in Manokin River show a good catch of young growth. Capt. Bozman claims that is the first good catch he has seen there for the past 10 years and prospects are good for another year.

Summing up the reports received, the indications are that the localities with fat oysters will have the heaviest drain at the beginning of the season but will be relieved as the oysters in other districts improve. The Conservation Department expects a heavier drain on the Maryland oyster bars this year than usual, owing to the blight which killed so many oysters in the state of Virginia. The deputy commanders and inspectors have been instructed to strictly enforce the oyster cull laws and every effort will be made by the department to conserve oysters that have not yet reached the legal size of 3 inches.

JOINT CONVENTION OF NATIONAL ASSOCIATION OF SHELL-FISH COMMISSIONERS AND OYSTER GROWERS AND DEALERS' ASSOCIATION OF NORTH AMERICA

BY AGREEMENT between the National Association of Shellfish Commissioners and the Oyster Growers and Dealers' Association of North America, a joint session was held at Sayville, Long Island, on August 19, 20, and 21, 1930.

Commissioner Swepson Earle, Dr. R. V. Truitt, acting Biologist, and Engineer H. E. Collins represented the Conservation Department of Maryland at this important assemblage.

Three sessions were held the first day—morning, afternoon, and night—and a great many interesting facts were presented. At the morning session, Dr. Herbert D. Pease, of the Pease Laboratories, Inc., New York, told of the work he was doing for the benefit of the oyster industry. Dr. Pease and his staff are employed by the Oyster Growers and Dealers' Association to study the habits of the oyster, its food value, and, especially, sanitary measures necessary to keep the oyster in prime condition for the consumers.

This association is spending considerable money for scientific research, and, in an address at the close of the meeting, its president, Mr. Howard Beach, of Connecticut, asserted that every dollar they had invested along this line had returned at least two.

Mr. J. M. Lemon, of the U. S. Bureau of Fisheries, gave an interesting talk on increasing the oyster market. To the growers this meant a lot, but to the Maryland representatives it is not so appealing, as our chief problem is to increase the supply of oysters.

The addresses in the afternoon were for the most part scientific in their nature, although very interesting from a practical standpoint also. H. F. Prytherch, of the U. S. Bureau of Fisheries, told of his efforts to get the oyster larvae to set. The main point brought out by him was that copper is necessary to make the young oysters attach themselves. By a series of experiments, in which a number of chemicals were tried, he has proven to those who have watched his work that an oyster can be made to "sit down." He says copper sulphate added to the water in seasons when the amount present is not sufficiently great will assist spatting. This is interesting to know because we frequently experience years in Maryland when larvae are present in our waters in great numbers and yet no catch of any consequence develops therefrom. It would seem worth while to try the experiment in our State.

One of the most interesting talks was made by Prof. T. C. Nelson, of the New Jersey Oyster Investigation Laboratory, on

the subject of "The Study of Larval Oysters as a Guide to Shell Planting." Professor Nelson told of the work his laboratory was doing for the planters of New Jersey and the actual results the people there are getting by cooperating with his department. Maryland waters are more widely scattered than Jersey waters and it would be impossible for one plant to give out this information. There must be a number of men trained to do this work and stationed in every tributary where shell planting is contemplated in order to get any information that can be made use of in a commercial way. The sooner we get our permanent laboratory and get men trained the sooner will our beds have a chance to be replenished.

Mr. R. E. Tarbett, of the U. S. Public Health Service, told of the effective way in which his bureau is handling the oyster situation. Every dealer has to be certified by the state authorities who report to the U. S. authorities. If a dealer does not keep his product free from bacteria his certificate is cancelled and that means he is out of business. For that reason the past five years have witnessed a wonderful clean-up on the part of oyster handlers.

Dr. D. W. Davis, of Virginia, led a discussion on "How the College Can Aid the Oyster Industry." This discussion was very ably handled by Professor F. P. Gorham, of Rhode Island, and Dr. R. V. Truitt, of Maryland.

At the night session Commissioner Earle led in a series of talks on "What the States Are Doing to Rehabilitate the Oyster Industry." Practically every oyster-producing state, from Massachusetts to Georgia, responded and the talks were very interesting.

On the second day the members of the convention were the guests of the Great South Bay oystermen. In the oyster houses of the Bluepoints Company Dr. Pease illustrated his experiments. The plant of this great company was thrown open for inspection and it was extremely interesting to note the precautions taken to put their oysters on the market in a very clean way. The shell stock is dumped into vast slatted bins, and clean salt water is pumped over these oysters until the mud is gone. No matter how careful the shucker is, he is sure to get some of the mud into his oysters when shucking them just as they come from the bottom. While it cannot be said that not a particle of mud goes into this company's product, it is obvious that the chances of so doing are greatly lessened by this method. The cleaner the oysters when opened the less washing needed and consequent better flavor for the consumer.

In the afternoon a trip was taken to the oyster beds of Great South Bay and the guests witnessed dredging operations and sampled the product.

The last day of the convention was held at Greenport, to which point the members were transferred by busses. At Greenport they were welcomed by the Mayor and prominent Long Island oystermen. The oyster houses were thrown open for inspection and were models of neatness and cleanliness; they were equipped to handle the stock as easily as it is possible to do. Some 15 dredge boats were put at the disposal of the delegates and the oyster beds around Shelter Island were visited. Dredges were thrown on the planted bottoms for demonstration and oysters were brought up for inspection.

There is no question that more money is being expended by the northern planters than in Chesapeake Bay for scientific research and the elimination of enemies of the oyster. The starfish is one of the most serious and thousands of dollars have been spent to exterminate it. Maryland, fortunately, is little troubled with this pest.

The convention members were entertained on their return to Greenport by an old-fashioned clambake for which New England is so famous. Practically all the delegates expressed interest in the oyster business as carried on in Long Island Sound, and they felt considerably benefited by the discussions which took place and the valuable papers presented on subjects relating to the oyster industry.

NOTES FROM A FREDERICK COUNTY FISHERMAN

FROM THE VIEW-POINT of the number of fish taken, the trout season ending July 1 has, without doubt, been the most successful our county has experienced in recent years. This is entirely due to the policy of the Conservation Commission in stocking with legal-size fish before the season opens. In no other way can good trout fishing be secured in small streams subjected to such heavy fishing as ours are. As a concrete example of the large demand made by fishermen upon a stream, the following observations will be of interest. This information was secured on Little Hunting Creek, one of the best streams in the county, of which a stretch of slightly under one-half mile runs through the writer's property.

On March 26, approximately 500 trout from 7″ to 10″ long were distributed in this portion of the stream. On March 30, the day before the season opened, an observation of the stream showed the trout to be well scattered, every pool containing from 10 to 25 fish, apparently in good condition. On the morning of the first day, between the hours of 7 and 10 A. M., 56 men and boys were encountered fishing on this stretch of stream, their reported catches varying from four to nine trout. Seven rods were observed fishing in one small pool, all catching trout that seemed to be biting like gudgeons. Shortly after the season opened another

planting of 500 large trout was distributed. On May 1, after one month of fishing, an observation tour disclosed 27 trout in the stream. On July 10, ten days after the season had closed and when the stream was very low and clear, only two trout were seen.

It is very evident from the above information that these trout were planted too close to the opening of the season to have become acclimated to wild life before being caught. They were accustomed to being fed every day and did not have time to acquire any of that elusive wariness that distinguishes the breed and makes their capture so difficult. It is safe to say that had the same number of trout been acclimated to stream life very few would have been taken under the conditions prevailing during the first days of the season, and better fishing would have ensued later on.

With our present knowledge of conditions it is very difficult to tell just when it is best to stock with legal-size fish. Late winter plantings are subjected to high waters and poor food conditions. Trout planted just after the season ends must endure low waters and warm temperatures and, in seasons of drought such as the present one, a large mortality would surely occur. Trout planted in October and November are liberated at a time when natural food is scarce and the chances of a large number of fish surviving the winter are slim. It seems best under the present conditions to stock just previous to the open season, and to continue to stock every two weeks during the season, thus insuring a constant supply of fish which, although liver-fed and tame, and very easy to catch, nevertheless will send the fisherman home happy with his limit of 10 fish.

Bass

The past spring was ideal for the spawning of bass. For the first time in years the Monocacy River was clear during the entire spawning and hatching season. The result was an enormous hatch of small-mouth bass fry which swarmed in every backwater and eddy. At the present time (early August) the fingerlings are still very numerous, although not as conspicuous as they were during the fry stage, and have attained a size of from 2″ to 3″.

The prolonged drought and high temperatures have not seemed to produce any great mortality of fish in our larger streams up to the present time. Fishing has been below normal, probably because of very high temperatures and the concentration of feed due to low waters. These same conditions, however, combine to make the observation of aquatic life in the stream very easy, and any observing fisherman must realize that his lack of success in catching bass is due to some other reason than the scarcity of bass themselves in the streams.

DROUGHT EFFECTS IN WESTERN MARYLAND

With the exception of Evitts Creek, all streams in Allegany County have gone dry. In Garrett, the Savage River, which has been drawn on by the City of Frostburg, is completely dried up below the pumping station. All the tributaries coming into Deep Creek Lake are either completely or nearly dry. The Youghiogheny River is holding up pretty well, although it is considerably lower than normal, and its tributaries on the west side are all flowing well. Washington County streams are 100 per cent. perfect, although some have dropped below normal. These streams are mainly spring-fed which accounts for their consistent supply.

In Frederick County all streams of the Monocacy watershed are low. There are only four that are not controlled by the City of Frederick Water Works. Fishing Creek and Big and Little Hunting Creeks, although lowered by the dry weather, are not sufficiently low to menace trout therein. The Monocacy above Double Pipe Creek in Carroll County is not flowing at all. Double Pipe Creek itself is flowing a good stream of water and is maintaining the Monocacy until it gets to the Linganore. The Linganore is flowing more water than any stream entering the Monocacy. All these streams show considerable bass, more, in fact, than it was thought existed in this county, and minnows in proportion. For this latter reason, there is no danger of a lack of food. No bass have been found dead, although a few dead catfish and suckers have been seen.

The Potomac is very low, but in good shape and able to hold all the fish that are in it. Montgomery County reports that all the sizeable streams are holding up well and there is no danger of fish mortality from that cause. Baltimore County reports practically the same condition.

TARIFF COMMISSION TO INVESTIGATE ALIEN-OWNED FISHING VESSELS

OWNERS of commercial fishing vessels in all of the seacoast states, as well as in Alaska, Hawaii, and Porto Rico, will shortly be requested by the United States Tariff Commission to furnish information concerning their nationality, whether citizens or aliens, and to give statistics on the quantities of fish produced in the high seas and in territorial waters. According to a statement issued today by the Tariff Commission, about 40,000 vessels are involved in the investigation. Government offices cooperating with the commission include the Bureau of Customs, the Coast and Geodetic Survey, the Bureau of Navigation, and the Bureau of Fisheries. The investigation has been ordered by the Tariff Commission pursuant to a Senate Resolution re-

questing the commission to make the inquiry. Under the Senate's resolution the commission is "requested to make an investigation of the entries of fish and other marine products into the United States from the high seas in vessels owned, chartered, leased, or rented, wholly or in part, by aliens, whether or not such aliens are domiciled in the United States."

Although the Senate resolution refers specifically to alien-owned fishing vessels the commission will include citizen-owned vessels so that comparative figures may be made available to Congress.

"This investigation," the commission states, "is not directed toward the exclusion of aliens from the American fisheries. It is solely for the purpose of ascertaining the present extent of our fisheries, the nationality of vessel owners, and the sources of production."

The program of investigation as outlined by the commission provides for completion of the work before the conclusion of the forthcoming session of Congress.—*United States Tariff Commission*, August 26, 1930.

LECOMPTE NAMED PRESIDENT OF FISHERIES SOCIETY

At the meeting of the American Fisheries Society, held this year at Toronto, Canada, on August 27, 28, and 29 in cooperation with the International Association of Game, Fish and Conservation Commissioners, E. Lee LéCompte, State Game Warden of Maryland, vice-president, was elected president of the former society.

The next annual meeting will be held at Hot Springs, Arkansas.

PHENOMENAL OYSTER SEASON IN CONNECTICUT

Along the coast of Connecticut there has occurred an unusually early and abundant set of oysters which exceeds all records for the past 15 years. This is attributed to the abnormally high air and water temperatures, abundant rainfall, and the very apparent improvement in the quality of the water as a result of a decrease in trade-waste pollution. In Milford Harbor the setting of oysters began on July 15 and has continued steadily to the end of the month and will undoubtedly last for another week, in view of the abundance of mature and immature larvae. In the harbor and inshore sound waters, 10,000 partition collectors were planted the early part of July and these have already received a heavy crop of spat.

On the offshore beds in Long Island Sound, the setting began on

July 22, which is approximately three weeks earlier than is usual, and the shells planted on these areas had received a set ranging from 25 to 100 spat per shell by July 28. Conferences have been held with a large number of the oyster-growing concerns and advance information and predictions given out regarding the time and intensity of setting. The oystermen have taken advantage of the favorable circumstances and have made the earliest and greatest planting of shells and gravel in recent years, and in addition have put out large numbers of partition collectors.

The work on starfish control carried out at Cold Spring Harbor, Long Island, has been speeded up in view of the fact that heavy sets of oysters in Connecticut waters are frequently accompanied by a heavy crop of young starfish, which soon devour them.—*U. S. Bureau of Fisheries.*

VIRGINIA FISH STEAMERS FINED

Three Virginia menhaden steamers—the Dolphin, the Helen Euchane, and the A. Booth Taylor of Reedville and Ditchley—were overtaken by Chief Inspector E. O. Townsend and other officials of the department on August 30, just as they were spreading their nets for a haul. Fines of $250.00 each were imposed for fishing in Maryland waters.

FORMER COMMANDER OF STEAMER McLANE DIES

Captain James A. Turner, of Salisbury, former commander of the Steamer Gov. R. M. McLane, and for 40 years connected with the Maryland Oyster Navy, died in Baltimore on August 18, at the age of 81 years.

Captain Turner was an officer of the Maryland Oyster Navy in the days when the oyster dredgers ruled the Chesapeake and with shanghaied crews invaded the forbidden territory of the oyster tongers and battled with the police force when it attempted to interrupt these illegal operations.

LOBSTER FOUND IN SOUTH RIVER

The Conservation Department's crab inspector at South River recently reported the catching of a lobster on a crab line off South River bridge by a local waterman.

It is hard to account for the presence of this crustacean in Maryland waters, as it is a confirmed New Englander, Delaware Bay being the southern limit of its habitat.

TRUITT REPORTS ON OYSTER SET

Dr. R. V. Truitt, biologist in charge of the Marine Laboratory at Solomons, made a trip of inspection on the power-boat Calvert to various sections of the Bay and tributaries, and, under date of September 8, makes the following report to the Conservation Department:

"There has been a light catch of spat all over the Bay and in all the tributaries, while an extraordinary catch has taken place in Eastern Bay. At the head of the Bay a most satisfactory catch has been experienced on the eastern bars—Swan Point, Hodges, and Tolchester—while only a very light catch has taken place on the west-shore bars, as Man O'War, Seven Foot Knoll, and Snake Rip. On our experimental shells in Tar Bay we again have a fine catch. The big bars in Tangier Sound, as during the past few years, show very little catch. However, in the Wicomico River in several places, private shell plantings have worth-while catches, and in one or two places shells planted on private beds and without a catch for three or four years show a fine set.

"In all the rivers where brood stock remains and there are shells a fair catch has been realized this year. The shells planted under your department show fine returns where such conditions obtain.

"As our work goes on it becomes more and more apparent that shells in being returned to the bottoms should not be planted on barren bottoms. Returns will be gotten only in proportion to the abundance of seed stock. We are confident that, except at the head of the Bay and one or two small areas elsewhere, shells are needed on every producing bar in the State; this in spite of the fact that oystermen in big numbers believe shell planting on productive bars is a wasteful activity.

"It may be that there will be a September catch again this year, though the indications do not point that way now. Oysters are just about out of their milt, are fattening, have heavy mantle folds, and are in fine condition for this season of the year."